



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 1 302 870 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
29.03.2006 Bulletin 2006/13

(51) Int Cl.:
G06F 17/30 (2006.01)

(43) Date of publication A2:
16.04.2003 Bulletin 2003/16

(21) Application number: **02256677.2**

(22) Date of filing: **25.09.2002**

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
IE IT LI LU MC NL PT SE SK TR**
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **12.10.2001 US 977038**

(71) Applicant: **NCR International, Inc.**
Dayton,
Ohio 45479 (US)

(72) Inventors:
• **Brown, Douglas P.**
Rancho Santa Fe,
CA 92067 (US)

- **Koppuravuri, Manjula**
Gunrock Road,
Secunderabad 500015 (IN)
- **Chaware, Jeetendra**
East Marredpaly,
Secunderabad 500026 (IN)

(74) Representative: **Williamson, Brian et al**
NCR Limited
International Patent Department
206 Marylebone Road
London NW1 6LY (GB)

(54) **Index selection in a database system**

(57) An index selection mechanism allows for efficient generation of index recommendations for a given workload of a database system. The workload includes a set of queries that are used to access tables in a database system. The index recommendations are validated

to verify improved performance, followed by application of the indexes. Graphical user interface screens are provided to receive user input as well as to present reports to the user.

EP 1 302 870 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 02 25 6677

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 6 169 983 B1 (CHAUDHURI SURAJIT ET AL) 2 January 2001 (2001-01-02)	1,21-24	G06F17/30
A	* the whole document *	2-20	
X	US 5 950 186 A (CHAUDHURI ET AL) 7 September 1999 (1999-09-07)	1,2, 21-24	
A	* the whole document *	3-20	
A	CHAUDHURI S ET AL: "Index merging" DATA ENGINEERING, 1999. PROCEEDINGS., 15TH INTERNATIONAL CONFERENCE ON SYDNEY, NSW, AUSTRALIA 23-26 MARCH 1999, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, 23 March 1999 (1999-03-23), pages 296-303, XP010326147 ISBN: 0-7695-0071-4 * abstract *	1-24	
A	VALENTIN G ET AL: "DB2 advisor: an optimizer smart enough to recommend its own indexes" DATA ENGINEERING, 2000. PROCEEDINGS. 16TH INTERNATIONAL CONFERENCE ON SAN DIEGO, CA, USA 29 FEB.-3 MARCH 2000, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, 29 February 2000 (2000-02-29), pages 101-110, XP010378697 ISBN: 0-7695-0506-6 * abstract *	1-24	
			TECHNICAL FIELDS SEARCHED (IPC)
			G06F
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
Berlin		3 February 2006	Bowler, A
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

2
EPO FORM 1503 03 82 (P04C01)



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 02 25 6677

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
P,A	<p>JUNGHOO CHO ET AL INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS: "A fast regular expression indexing engine" PROCEEDINGS 18TH. INTERNATIONAL CONFERENCE ON DATA ENGINEERING. (ICDE'2002). SAN JOSE, CA, FEB. 26 - MARCH 1, 2002, INTERNATIONAL CONFERENCE ON DATA ENGINEERING. (ICDE), LOS ALAMITOS, CA : IEEE COMP. SOC, US, vol. CONF. 18, 26 February 2002 (2002-02-26), pages 419-430, XP010588256 ISBN: 0-7695-1531-2 * abstract *</p> <p style="text-align: center;">-----</p>	1-24	
			TECHNICAL FIELDS SEARCHED (IPC)
The present search report has been drawn up for all claims			
Place of search Berlin		Date of completion of the search 3 February 2006	Examiner Bowler, A
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

2
EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 02 25 6677

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

03-02-2006

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6169983	B1	02-01-2001	NONE

US 5950186	A	07-09-1999	US 5926813 A 20-07-1999
			US 5960423 A 28-09-1999
			US 5913206 A 15-06-1999
			US 5913207 A 15-06-1999
